

DESCRIPTIONS OF TWENTY-THREE SPECIES OF GASTROPODA
FROM THE PERSIAN GULF, GULF OF OMAN, AND ARABIAN
SEA, DREDGED BY MR. F. W. TOWNSEND, OF THE INDO-
EUROPEAN TELEGRAPH SERVICE, IN 1903.

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PLATE V.

THE following species of Gastropoda were mostly dredged by Mr. F. W. Townsend at one particularly favourable station in the Gulf of Oman, early in April, 1903. It will be long before a complete catalogue can be drawn up of the exceeding riches of this one spot. In the meantime twenty-three new forms are now added to the fauna, the larger part of them being, as usual, Pleurotomidæ. I must again express my great indebtedness to Dr. W. H. Dall and Mr. Edgar A. Smith, I.S.O. Mr. J. W. Jackson has also kindly spent much time in sorting shell-sand from the dredging just mentioned, as have Mr. Ernest R. Sykes, Mr. G. B. Sowerby, and Mr. Robert Standen.

LOTORIUM (COLUBRARIA) CONCINNATUM, n.sp. Pl. V, Fig. 1.

L. testa oblongo-fusiforimi, mediocri, solidiuscula, brunneo-rufescente, anfractibus 8, quorum tres vel quatuor apicales læves, læte brunnei, globulosi, cæteris irregularibus, superficialiter pulchre decussatis, ad juncturas lirarum arcte gemmulatis, varicibus crebris, transversim albis et brunneo-rufis fasciis variegatis, apertura triangulatim oblonga, labro incrassato, intus multidenticulato, regione columellari nitida, alba, canali brevi, vix recurva. Long. 21.5, lat. 8 mm. (sp. maj.).

Hab.—Persian Gulf, Gulf of Oman, lat. 25° 23' N., long. 50° 40' E., 35 to 41 fathoms. Also off the Mekran coast, Charbar, 9½ fathoms.

The example taken as the type came from Charbar; the smaller specimens all show the apical whorls, smooth, globular, semi-pellucid brown, very clearly. The whorl surface is clearly decussate, the liræ at the points of junction being gemmulate. The varices are numerous, and elegantly banded with alternate white and reddish-brown fasciæ.

Allied to *L. (Colubraria) reticulatum*, Blvle., from the Mediterranean, and *L. Ceylonense*, Sowb., also an inhabitant of the Arabian Sea and Persian Gulf.

BULLIA (PSEUDOSTROMBUS) STRENNARIA,¹ n.sp. Pl. V, Fig. 10.

B. testa fusiformi, rapide attenuata, solidula, anfractibus 11, quorum apicales tres-quatuor, albo-vitrei, pellucidi, perlæves, tumiduli, mamillares, cæteris apud suturas impressis atque crenulatis, superne

¹ *Strena*, a New Year's gift.

crassieostatis, costis rugosis, undique spiraliter rudiliratis, penultimo et ultimo lævioribus, costis irregularibus, intermissis vel, interdum, omnino absentibus, superficie spiraliter undique tenuilirata, liris arctis, apertura late ovata, labro tenui, expanso, canali brevi, columella paullum excavata.

- (a) *typica*: colore omnino albido vel pallide stramineo, unicolore.
 (b) *melaleuca*: colore pallescente, undique spiraliter uni vel bizonata, zonis livido-nigrescentibus.
 (c) *plumbea*: colore livido-plumbeo, regione labiali, cum columellari, solum exceptis, albescentibus.

Long. 30, lat. 10 mm. (sp. typ. maj.).

Hab.—Persian Gulf (W. D. Cumming in Mus. Brit.), Maskat, 7–15 fathoms; Galig Island, 8 fathoms (var. *b*, *melaleuca*); Ormara beach (*a*, *typica*). Also in several other places along the Mekran coast, usually in shallow water, say 3–10 fathoms.

This interesting *Bullia* has, until now, been confounded with the similar but coarser-grained *B. Cumingiana*, Dkr, and I am very much indebted to Mr. E. A. Smith for having called my attention to its specific distinctions. I take as the typical form, because the most generally distributed, the white or pale stramineous form, never clouded or banded with any darker colour. The intermediate (var. *melaleuca*) is of a very pale bluish-white ground colour, the whorls once or twice banded spirally, these bands being of a dark livid hue. Examples of this variety are mostly smaller than the type. The third variety (*plumbea*) is almost entirely of a dark leaden grey, relieved only by the whiteness of the labial and columellar regions, standing out in sharp contrast.

I somewhat doubt the occurrence of the true *B. Cumingiana* in the Persian Gulf area.

COLUMBELLA (ASTYRIS) AGATHA, n.sp. Pl. V, Fig. 11.

C. testa ovata, semipellucida, lactea, nitida, perlævi, anfractibus 6–7, apicali parvo, omnibus lævissimis, simplicibus, parum ventricosulis, ultimo effuso, apertura ovata, labro tenui, expanso, canali brevi, columella obliqua. Long. 7, lat. 2.5 mm. (sp. max.).

Hab.—Persian Gulf, Gulf of Oman, lat. 24° 58' N., long. 56° 54' E., 156 fathoms. Also lat. 23° 55' N., long. 57° 48' E., 22 fathoms.

A thin, semi-pellucid, unicolorous shell, giving every evidence of being an inhabitant of the deep sea. All the many specimens found were dead shells, but in good and clear condition. I am in this, as in several other instances, indebted to Dr. W. H. Dall for his opinion as to the subgenus of this interesting new form. It may be compared with *C. (Astyris) diaphana*, Verrill, and *C. profundæ*, Dall,¹ from the United States, both species having been dredged from 65 to 805 fathoms at various stations between Rhode Island and Havana.

¹ Bull. Mus. Comp. Zool., vol. xviii, No. 29, pp. 191, 192, pl. xxxv, figs. 3, 9.

SCALA (*ACRILLA* ?) *COPHINODES*,¹ n.sp. Pl. V, Fig. 17.

S. testa attenuato-fusiforimi, gracili, delicata, alba, parum nitida, anfractibus (probabiliter) 15-16, quorum apicales tres, perlæves, diaphani, cæteris—certe anfr. 9-10—multum apud suturas impressis, tumidulis, arctissime undique longitudinaliter obliquiliratis, liris acutis, lævibus, interstitiis sub lente spiraliter pulchre striatulis, apertura rotunda, peristomate paullum expanso, haud continuo, marginem apud columellarem incrassato, lævi, albo, nitido. Long. 10, lat. 2.5 mm.

Hab.—Persian Gulf, Gulf of Oman, lat. 24° 58' N., long. 56° 54' E., 156 fathoms.

When preparing an account of the *Scalae* of the Persian Gulf, Mr. R. Standen and I were compelled to omit this very distinct species, owing to our only possessing two fragments. Since then, Mr. J. W. Jackson has found in the shell-sand an apical tip, and a small but quite perfect juvenile example, possessing nine whorls in all. With the aid of these I am able, to some extent, to diagnose it, but it is not possible to say what size a full-grown specimen would attain to. It is most likely an *Acrilla*, allied to *S. acuminata*, Sowb., which occurs in the same region. The acute longitudinal riblets are nearly 50 on the largest whorl examined, this being probably the antepenultimate. It differs from other *Acrillæ*, however, in the close spiral striolation, the surface not becoming decussate, as the riblets themselves remain smooth.

ACLIS BELTISTA,² n.sp. Pl. V, Fig. 18.

A. testa obtecte umbilicata, gracillima, attenuata, alba, anfractibus 13-14, quorum apicales tres parvi, perlæves, vitrei, cæteris apud suturas multum impressis, ventricosis, undique spiraliter arete cariuulatis, carinulis aufractuum superiorum duabus, antepenultimi et penultimi tribus, ultimi anfractus quatuor, superficie ipsa lævi, nitida, apertura fere rotunda, labro ad basin paullum expanso, fere continuo. Long. 6, lat. 1.5 mm.

Hab.—Persian Gulf, Gulf of Oman, lat. 24° 58' N., long. 56° 54' E., 156 fathoms.

A very graceful species, conspicuously keeled, its nearest ally in its fauna being *A. calotropis*,³ M. & S., a much smaller species, with only one carina in the centre of each whorl. A few examples only.

RISOA (*SCROBS*) *COLUMEN*,⁴ n.sp. Pl. V, Fig. 21.

R. testa cylindrica, albo-lactea, delicata, nequaquam nitente, anfractibus 6, quorum apicales duo, apice ipso plauato, fere immerso, cæteris ad suturas impressis, gradatulis, ultimo fere recto, cylindrico, apertura ovata, peristomate continuo, incrassato, albo, expanso, columella obliqua. Long. 4, lat. 1.3 mm. (sp. maj.); long. 3, lat. 1 mm. (sp. min.).

¹ *κοφινώδης*, basket-like.

² *βελτιστός*, the best.

³ Proc. Zool. Soc., June, 1901, p. 357.

⁴ *Columen*, a column.

Hab.—Persian Gulf, Gulf of Oman, lat. 24° 58' N., long. 56° 54' E., 156 fathoms.

A delicate milky-white opaque *Rissoa*, the peristome being in some specimens almost, in others entirely, separated from the body-whorl, this peculiarity forming the chief characteristic of differentiation in the subgenus *Scrobs*, proposed by Dr. Boog Watson (cf. *Voy. Challenger*, vol. xv, pp. 611, 612). I am indebted to Dr. W. H. Dall for his opinion on this matter. Mr. C. Hedley¹ raises it to generic rank.

CYCLOSTREMA GYALUM,² n.sp. Pl. V, Fig. 22.

C. testa mediocri, placentiformi, solidula, albo-straminea, anfractibus 5, apicali minutissimo, ultimo rapide accrescente, acute tricarinato, carina una infra, juxta suturas, altera apud peripheriam, tertia regionem umbilicarem circumambiente, superficie omni sub lente leniter et obscure spiraliter striolato, umbilico perprofundo et lato, apertura quadratula, labro angulato, tenui. Alt. 2, diam. 5 mm.

Hab.—Persian Gulf, Gulf of Oman, lat. 24° 58' N., long. 56° 54' E., 156 fathoms.

Conspicuous for its thrice acutely keeled body-whorl, the basal carina encircling the umbilicus, which is particularly large and deep in comparison with the proportions of the shell. Allied to *C. angulatum*, A. Ad., and *C. Beauvi*, Fischer, but smaller and differing altogether in form.

FOSSARUS (COUTHOUYIA) QUINQUECARINALIS, n.sp. Pl. V, Fig. 19.

F. testa anguste umbilicata, alba, oblonga, solidiuscula, versus apicem rapide attenuata, anfractibus 6, quorum apicales duo, parvi, globulares, vitrei, cæteris gradatulis, supernis tribus longitudinaliter obscure liratis, haud angulatis, penultimo acute bicarinato, ultimo anfractu quinque carinis prædito, quarum duæ, inter suturas peripheriamque, perconspiciæ et gemmuliferæ, tres inter peripheriam et basin minores, regionem circa umbilicarem carina duplicata fortis, apertura ovato rotunda, labro extus subquingulari, intus simplici, tenui, columella fere recta. Long. 3, lat. 1·25 mm.

Hab.—Persian Gulf, Gulf of Oman, lat. 24° 58' N., long. 56° 54' E., 156 fathoms.

A very small, but highly sculptured species. A few examples only have, so far, occurred.

FOSSARUS (COUTHOUYIA) THELACME,³ n.sp. Pl. V, Fig. 20.

F. testa parva, profunde umbilicata, ovata, alba, haud nitente, delicata, anfractibus 5, apicalibus tribus, mammosis, parvis, vitreis, uniformibus inclusis, ultimo permagno, rapide accrescente, undique delicatissime et arcte spiraliter striato, lineis microscopicis longitudinaliter intertextis, apertura magna, lata, ovata, labro tenui, effuso, simplici. Long. 3, lat. 1·5 mm.

¹ Mem. Austr. Mus., vol. iv, pt. 6 (1903), p. 353.

² γύαλον, a hollow, from the wide umbilicus.

³ θηλή ἀκμή, nipple-tipped.

Hab.—Persian Gulf, Gulf of Oman, lat. $24^{\circ} 58' N.$, long. $56^{\circ} 54' E.$, 156 fathoms.

Distinguished by its mammæform apex and proportionately large body-whorl, the surface being shagreened by close microscopical spiral liræ crossed by still more minute striæ. These two species of *Fossarus* occurred together, neither very plentifully.

TURBONILLA ANGUSTISSIMA, n.sp. Pl. V, Fig. 13.

T. testa pergracili, multum attenuata, semipellucida, albo-lactea, anfractibus 11–12, quorum apicales duo-tres conspicue heterostrophii, cæteris apud suturas impressis, ventricosulis, undique longitudinaliter obliquiliratis, litarum numero anfractum apud ultimum circa 14, apertura ovata, labro tenui, apud basin expanso, columella fere recta. Long. 3, lat. .75 mm.

Hab.—Persian Gulf, Gulf of Oman, lat. $24^{\circ} 58' N.$, long. $56^{\circ} 54' E.$, 156 fathoms.

Easily discerned from its congeners by its excessive narrowness of whorl in proportion to its length. The longitudinal liræ are oblique, and not crowded. There are a few other hitherto unknown *Turbonilla* sifted from the same dredging that await description, but none so remarkable as *T. angustissima*.

SYRNOLA AMBAGIOSA,¹ n.sp. Pl. V, Fig. 12.

S. testa cylindrico-fusiforimi, albo-lactea, nitida, subpellucida, anfractibus 8–10, quorum apicales duo vitrei, bulbosi, heterostrophii, cæteris præcipue supernis, tumidis, superficie perlævi, lineis internis spirabilibus conspicuis, apertura ovata, labro simplici, columella breviter uniplicata. Long. 3, lat. .75 mm.

Hab.—Persian Gulf, Gulf of Oman, lat. $24^{\circ} 58' N.$, long. $56^{\circ} 54' E.$, 156 fathoms.

Many specimens occurred at the above station of this small, glassy, shining, milk-white species, conspicuous for its remarkably blunt, bulbous, glassy, heterostrophe apex, and swollen whorls, giving a sinuous appearance to the lateral contour of the shell, and suggesting the trivial name proposed for it. The opaque internal spiral lineation is also very marked in this species. I know no *Syrnola* very comparable; it may, however, be slightly akin to *Odostomia* (*Turbonilla*) *amebæa*, Wats.,² from Cape York, N. Australia, 153 fathoms, although this species is acutely carinate. The line of demarcation between the smaller *Syrnola* and the larger *Odostomia* is often ill-defined.

EULIMELLA GEDROSICA, n.sp. Pl. V, Fig. 14.

E. testa aciculato fusiformi, lactea, tenui, anfractibus 6, quorum apicales duo lactei, læves, omnino heterostrophii, cæteris longis, ad suturas paullum gradatis, sub lente aretissime et delicatissime striatis, fere rectis, apertura oblonga, angusta, labro simplici, columella obliqua. Long. 3.75, lat. 1 mm.

¹ *Ambagiosus*, sinuous.

² Cf. Rep. Challenger Expedition, xv, p. 495, pl. xxxiii, fig. 1.

Hab.—Persian Gulf, Gulf of Oman, lat. 24° 58' N., long. 56° 54' E., 156 fathoms.

Judging from the figures of *E. simplex* (Orb.)¹ from Jamaica, and *E. laxa*, Wats., from Raines Island, Cape York, 155 fathoms ("Challenger" Expedition), some affinity exists between them and this species. *E. simplex* is also very finely spirally striate, *E. laxa* is "spirally microscopically scratched."² *E. Philippiana*, Dkr., from Japan, is also rather similar in form, but this is a smooth and shining species. Gedrosia is the ancient name of a maritime province of Southern Persia.

EULIMELLA VENUSTA, n.sp. Pl. V, Fig. 15.

E. testa aciculata, pergracili, alba, nitidissima, solidula, anfractibus 14, quorum apicales duo heterostrophi, vitrei, cæteris apud suturas impressis, infra medium tumide subangulatis, semipellucidis, perlævibus, nitidis. apertura quadratula, labro simplici, columella recta. Long. 7, lat. 1.25 mm. (sp. maj.).

Hab.—Arabian Sea, lat. 18° 58' N, long. 71° 45' E., 40 fathoms.

An extremely graceful shining white species, being a typical *Eulimella*, whose whorls, impressed at the sutures, are slightly pagodiform, each being tumid and bluntly angled below, just above the sutures, and pinched in at the upper portion. This is the fourth species of the genus now described from these seas. A smaller and imperfect example of what is probably the same species also occurred in the prolific dredging in the Gulf of Oman at 156 fathoms.

FENELLA XANTHACME,³ n.sp. Pl. V, Fig. 16.

F. testa imperforata, attenuato-fusiformi, alba, solidula, anfractibus 12, quorum apicales quatuor fulvi, apice ipso lævi, dein huic proximis obscure longitudinaliter striatis, cæteris 8, multum apud suturas impressis, ventricosis, undique crasse reticulatis, ad juncturas lirarum costarumque gemmulatis, interstitiis fere quadratis, ultimo anfractu numero costarum longitudinalium circa 15, lirarum 6, infra peripheriam usque ad basin 5 lirato, apertura rotundo-ovata, labro tenui. Long. 7, lat. 2 mm.

Hab.—Persian Gulf, Gulf of Oman, lat. 24° 58' N., long. 56° 54' E., 156 fathoms.

An interesting *Fenella*, the fulvous apical whorls being very conspicuous without the aid of a lens. The network, uniformly ornamenting the somewhat ventricose whorls, is coarse for the size of the shell, the interstices being almost square and somewhat large.

ANCISTROSYRINX ORIENTIS, n.sp. Pl. V, Fig. 3.

A. testa eleganter fusiformi, parum nitida, pallide brunnea, delicata, tenui, anfractibus 8, quorum apicales duo parvi, globulares, vitrei, cæteris lævibus, ad medium acutangulatis, carina peripherali centraliter

¹ D'Orbigny: Moll. Cuba, pl. xvi, fig. 29.

² Cf. Rep. Challenger Expedition, xv, pp. 497, 498, pl. xxxiii, fig. 6.

³ ξανθακμή, with yellow point.

decorata, spinigera, spinis paucis regularibus, latis, brevibus, numero ultimum apud anfractum circa 12-13, ultimo apud basin producto, apertura anguste oblonga, labro paullum expanso, ad medium angulato, tenui, sinu indistincto, canali longa, paullum recurvirostri. Long. 9.5, lat. 4 mm. (sp. maj.).

Hab.—Persian Gulf, Gulf of Oman, lat. 24° 58' N., long. 56° 54' E., 156 fathoms.

The author of the genus, having kindly examined my specimens, pronounces them generically the same as the Western *A. elegans* and *A. radiata*, Dall,¹ the first from Florida (Pourtales) and Cuba, dredged at 805 fathoms, the second found in various stations in the Gulf of Mexico and West Indies during the "Blake" Expedition. The old *Pleurotoma cedo-nulli*, Reeve, likewise is transferred to the same genus. This is supposed to have come from Panama (Cuming). *A. orientis*, being the first species yet recorded from the Old World, is for that reason alone worthy of description at the present juncture, although none of the five or six examples procured from shell-sand and globigerina-ooze are otherwise than in very juvenile condition. In all probability, when full grown, some sculpture would be present on, at all events, the body-whorl; and the size would be at least doubled, say 18 mm.

PLEUROTOMA TRYPANODES,² n.sp. Pl. V, Fig. 2.

P. testa fusiformi, albida, eleganter tornata, anfractibus 11-12, quorum apicales 3½ globulares, parvi, vitrei, cæteris spiraliter tornatis, fricarinatis, et liratis, liris cum carinis alternantibus, una carina infra, juxta suturas, duabus infra medium anfractuum, striis indistinctis longitudinaliter conjugatis, ultimo anfractu spiraliter magnopere carinato et lirato usque ad basin, apertura ovata, labro tenui, sinu lato sed non profundo, canali producta, columella recta. Long. 21, lat. 7 mm.

Hab.—Arabian Sea, lat. 18° 58' N., long. 71° 45' E., 40 fathoms.

A most refined species, near *Pl. oxytropis*, Sowb., but with more regular angled carinæ and alternating lirations.

MANGILIA BATHMIS,³ n.sp. Pl. V, Fig. 4.

M. testa ovato-fusiformi, utrinque attenuata, solida, alba, anfractibus 6, quorum tres apicales perlæves, vitrei, nitidi, cæteris conspicue gradatis, ad suturas quasi canaliculatis, longitudinaliter oblique crassicostatis, costis apud ultimum anfractum numero circa 14, liris spiralibus, in penultimo circa 6, decoratis, ultimo producto, apertura oblonga, labro paullum incrassato, canali lata. Long. 6, lat. 2 mm.

Hab.—Persian Gulf, Gulf of Oman, lat. 24° 58' N., long. 56° 54' E., 156 fathoms.

Of peculiar form, the thickened ribs and terraced whorls being noteworthy. Of very rare occurrence at the above locality.

¹ Bull. Mus. Comp. Zool., xviii, No. 29, pl. xii, fig. 12, and pl. xxxvii, fig. 3.

² *τρυπανώδης*, screw-like.

³ *βαθμῖς*, a terraced flight of steps.

MANGILIA ECPHORA,¹ n.sp. Pl. V, Fig. 5.

M. testa parva, ovato-fusiforimi, albida, anfractibus 6, quorum apicales tres pulcherrime cancellati, cæteris superne fortissime angulatum projectis, dein ad suturas declivibus, longitudinaliter crassicostatis, costis numero ultimum apud anfractum circa 14, undique spiraliter arcte liratulis, interstitiis præcipue oblongo-quadratis, profundis, ultimo apud basin gracili, canali producta, fusoidæ, apertura oblonga, labro incrassato, eleganter transversim lirato et gemmulato, sinu perlato, haud profundo, columella fere recta. Long. 5, lat. 2 mm. (sp. maj.).

Hab.—Persian Gulf, Gulf of Oman, lat. 24° 58' N., long. 56° 54' E., 156 fathoms.

Remarkable for its acutely angled ridge surmounting the upper portion of the whorls. Very elegant in form, fusoid towards the base. The nuclear whorls are seen with a lens to be very finely cancellate; the longitudinal ribs and spiral liræ are extremely pronounced, the interstices being squarely and deeply cut.

Allied to *Daphnella Amphitrites* and *nereïdum*, M. & S., from the same locality; perhaps, indeed, these two species might be transferred to *Mangilia* without detriment.

MANGILIA (GLYPHOSTOMA) PYCNOCHILA,² n.sp. Pl. V, Fig. 6.

M. testa ovato-fusiforimi, crassa, albida, persolida, anfractibus 8, quorum tres apicales subvitrei, lactei, læves, glabrati, cæteris infra medium unangulatis, perobscure longitudinaliter costatis, costis crassis, undique spiraliter crassiliratis, liris numero ultimum apud anfractum 29–30, interstitiis pulcherrime et arcissime longitudinaliter striatis, apertura anguste oblonga, labro percrasso, intus, simul ac margine columellari, albo, lævi, nitido, canali brevi. Long. 9, lat. 3·5 mm.

Hab.—Persian Gulf, Mussandam, 47 fathoms.

A *Glyphostoma* with somewhat obscure but thick longitudinal ribs, closely spirally lirate, the interstices being most finely striate. The outer lip is most peculiarly thickened, more so, proportionately speaking, than in any other Pleurotomoid of my acquaintance.

CLATHURELLA AMPHIBLESTRUM,³ n.sp. Pl. V, Fig. 7.

C. testa fusiformi, albida, tenui, anfractibus 8, quorum apicales quatuor ochracei, sub lente pulchre cancellati, cæteris ad suturas gradatis, supra unangulatis, longitudinaliter costatis, costis crassis, fere rectis, numero ultimum apud anfractum 14, spiraliter liratis, liris paucis, interstitiis oblongis, costis ad juncturas lirarum pulchre gemmulatis, apertura oblonga, labro incrassato, sinu suturali lato, haud profundo, margine columellari recto, canali brevi. Long. 7·5, lat. 2·5 mm.

Hab.—Persian Gulf, Gulf of Oman, lat. 24° 58' N., long. 56° 54' E., 156 fathoms.

This species has some points in common with *Mangilia eephora* just described, but the very prominent angled ridge being absent, its

¹ ἔκφορα, a projection

² πικνοχέϊλος, with thickened lip.

³ ἀμφίβληστρον, a net.

appearance is far more normal. All the examples are dead, and consequently it is impossible to say what the coloration may be.

CLATHURELLA EPIXANTHA,¹ n.sp. Pl. V, Fig. 8.

C. testa ovata, curta, solida, pallide ochracea, anfractibus 8, quorum tres apicales (apice ipso parvo, vitreo, huic duobus proximis sub lente obscurissime longitudinaliter striatulis), cæteris costatis, costis crassis, et spiralliter crassiliratis, interstitiis oblongo-quadratis, apertura ovata, labro incrassato, intus paucidenticulato, sinu lato et profundo, columella fere recta, canali brevi. Long. 6, lat. 2 mm.

Hab.—Persian Gulf, Gulf of Oman, lat. 24° 58' N., long. 54° 56' E., 156 fathoms. Also lat. 23° 55' N., long. 57° 48' E., 22 fathoms.

A coarsely reticulated, brightly coloured little shell, with well-defined sinus, and short canal. It exhibits no special peculiarity, but neither monographs nor the National collection have been able to afford any aid towards its identification.

CLATHURELLA HEDLEYI, n.sp. Pl. V, Fig. 9.

C. testa ventricoso-fusiformi, parva, tenui, albida vel pallide brunnea, anfractibus 9, quorum tres apicales parvi, eleganter longitudinaliter striatuli, cæteris apud suturas multum impressis, tumidis, duobus supernis (exclusis apicalibus), tribus carinis spiralingibus, antepenultimo et penultimo quatuor, ultimo anfractu quinque carinis præditis, costulis longitudinalibus tenuibus circiter 25, undique ad juncturas carinarum costularumque breviter sed acute echinatis, interstitiis lævibus, ultimo infra peripheriam liris spiralingibus ad basin decorato, apertura ovata, labro tenui, acuto, sinu suturali lato, profundo, canali mediocri, margine columellari fere recto. Long. 9, lat. 4 mm.

Hab.—Persian Gulf, Gulf of Oman, lat. 24° 58' N., long. 56° 54' E., 156 fathoms.

When describing *Clathurella Sykesii*,² it was mentioned that a near ally had lately come to light. Allusion was then made to the present species. The type of *C. Sykesii* was not in very good condition for figuring, unfortunately, and the shell is hardly fairly represented, excepting as regards its general form. It is almost as echinulate as *C. Hedleyi*, but much narrower, and the longitudinal ribs are fewer in number. The apical whorls are either quite smooth or obscurely striolate longitudinally.

By a curious coincidence, on the very day I had commenced to study the species now under discussion, I received from Mr. C. Hedley the second portion³ of his elaborate treatise on the Mollusca of the "Thetis" Expedition, my attention being therefore at once drawn to the description, with figure, of *Pleurotoma vepratrica*, Hedley, sp. nov., from four or five stations off the coast of Australia, dredged from 24 to 75 fathoms. This species seems almost exactly intermediate,

¹ ἐπίξανθος, somewhat tawny, in allusion to the colour.

² Ann. & Mag. Nat. Hist., ser. VII, vol. XII, p. 314, pl. XXIII, fig. 4.

³ Mem. Austr. Mus., vol. IV, pt. 6 (October, 1903).

though quite distinct, between *C. Hedleyi* and *C. Sykesii*, the former being the most abbreviated, ventricose, and multicostate, the latter the narrowest, most fusoid, and fewest ribbed. I cannot trace the least resemblance, either, to an *Ancistrogyrinæ* which Mr. Hedley mentions exists in his *C. vepratice*. Doubtless *C. asperulata*,¹ E. A. Smith, from the North Arabian Sea, is likewise akin to these.

It gives me much pleasure to name this species after my friend Mr. Charles Hedley, who is prosecuting such successful researches amongst the rich molluscan fauna of Australia and the South Pacific Ocean.

PHILINE SYKESII, n.sp. Pl. V, Fig. 23.

P. testa minuta, subquadrata, pertenui fragilissima, haud nitida, albo-lactea, superficie ultimi anfractus undique spiraliter pulcherrime et arcte catenulata, spira celata, apertura maxima, labro superne producto, angulato, haud multum effusa, tenui, margine minute crenulato, columella lente obliqua. Alt. 2·5, diam. 1·5 mm.

Hab.—Persian Gulf, Gulf of Oman, lat. 24° 58' N., long. 56° 54' E., 156 fathoms.

I am grateful to Mr. E. R. Sykes for calling my attention to this small *Philine*, which I had thought but a juvenile form of *P. orientalis*, A. Ad., a species also occurring in the same seas. The frontal projection of the outer lip is peculiar, and like no species with which I am acquainted. The shagreened chain-like spiral ornamentation, visible only with a very strong lens, resembles that of other species. I have only seen two or three examples, all dead shells, and some encrusted with *Globigerinæ* and other Foraminifera.

EXPLANATION OF PLATE V.

- FIG. 1. *Lotorium (Colubraria) concinnatum*, n.sp.
 ,, 2. *Pleurotoma trypanodes*, n.sp.
 ,, 3. *Ancistrogyrinæ orientis*, n.sp.
 ,, 4. *Mangilia bathmis*, n.sp.
 ,, 5. ,, *cephora*, n.sp.
 ,, 6. ,, (*Glyphostoma*) *pynochila*, n.sp.
 ,, 7. *Clathurella amphiblestrum*, n.sp.
 ,, 8. ,, *epixantha*, n.sp.
 ,, 9. ,, *Hedleyi*, n.sp.
 ,, 10. *Bullia (Pseudostrombus) strenaria*, n.sp.
 ,, 11. *Columbella (Astyris) agatha*, n.sp.
 ,, 12. *Syrnola ambagiosa*, n.sp.
 ,, 13. *Turbonilla angustissima*, n.sp.
 ,, 14. *Eulimella gedrosica*, n.sp.
 ,, 15. ,, *venusta*, n.sp.
 ,, 16. *Fenella xanthacme*, n.sp.
 ,, 17. *Scala (Acrilla?) cophinodes*, n.sp.
 ,, 18. *Actis beltista*, n.sp.
 ,, 19. *Fossarus (Couthouyia) quinquecarinalis*, n.sp.
 ,, 20. ,, ,, *thelacme*, n.sp.
 ,, 21. *Rissa (Scrobs) columen*, n.sp.
 ,, 22. *Cyclostrema gyalum*, n.sp.
 ,, 23. *Philine Sykesii*, n.sp.

¹ Ann. & Mag. Nat. Hist., 1882, vol. x, p. 296.